I CLAIM:

1. A system for separating and aligning small parts, each small part having a head and the small parts being deposited in bulk in a storage container, the system comprising:

a separating device arranged on an output side of the storage container;

an aligning station adjoining the separating device, the aligning station precisely positioning each small part in a heads up orientation to be transferred; and

a transfer device, connected with the aligning station, transferring each small part to a processing unit.

2. The system according to Claim 1, wherein the separating device includes a ring whose interior surface area has pockets embedded in a radial direction, and which ring can be rotated by a drive applied to an exterior surface area of the ring, the ring rotating about a horizontal axis.

3. The system according to Claim 2, wherein two plates, forming a chamber, rest on two surfaces of the ring.

4. The system according to Claim 2, wherein the ring can be rotated in a timed manner.

5. The system according to Claim 3, wherein the aligning station is arranged directly below one of the pockets, which pocket is in a respective timed position, and the chamber is positioned below the aligning station.

6. The system according to Claim 2, wherein a first sensor, which is stationary with respect to the rotatable ring, is provided, the first sensor indicating whether a small part occupies one of the pockets.

7. The system according to Claim 4, wherein the timed manner can be controlled by a second sensor.

8. The system according to Claim 2, wherein the ring can be driven by way of driving rollers resting against an exterior surface area of the ring.

9. The system according to Claim 1, wherein the aligning station includes two cheeks between which a longitudinal slot is formed whose upper lateral edge areas each form a support for a head of the small part , and a width of the slot being larger than a shaft diameter of the small part but smaller than the head's diameter of the small part.

10. The system according to Claim 9, wherein the supports are constructed as an inclined plane which slopes from the ring toward an outside area of the aligning station.

11. The system according to Claim 9, wherein the aligning station includes a pneumatically operated driving device by which a small part, resting on the supports , can be pushed into a feeding shaft which leads into the transfer device.